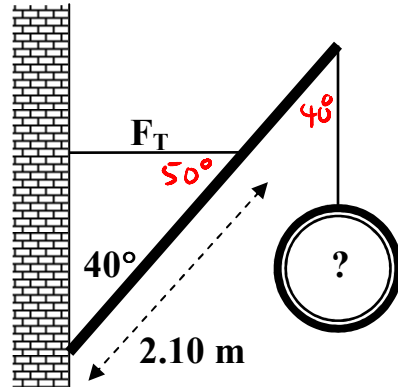
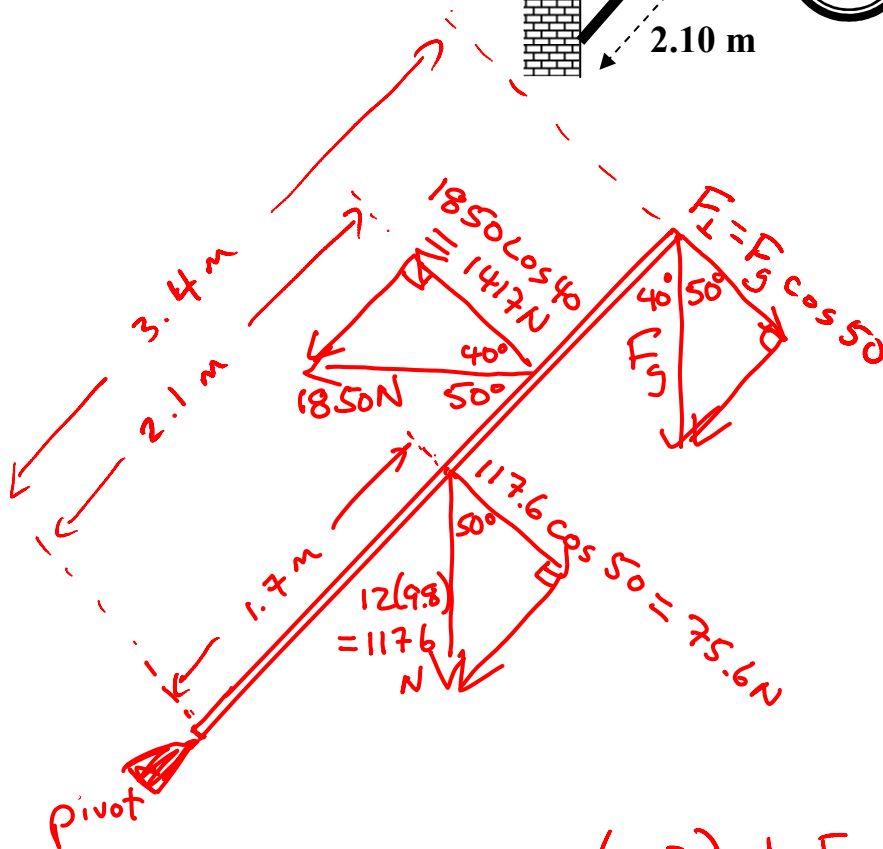


**Example #14.** The 12.0 kg uniform boom below has a length of 3.40 m. The cable can withstand a tension ' $F_T$ ' of 1850 N before breaking. What is the largest weight that can be hung from the boom in the location indicated?



→ must find 1 components for each force



$$\tau_{cw} = \tau_{ccw}$$

$$75.6(1.7) + F_g \cos 50(3.4) = 1417(2.1)$$

$$F_g = 1.3 \times 10^3 \text{ N}$$